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APPLICATION NO.	FIL	ING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/846,568	09/846,568 05/01/2001		Michael Christopher Martin	RSW920010076US1	4861	
46583	7590	10/13/2006		EXAMINER		
		ERNSTEIN, P.L.C	CHANG, JUNGWON			
1950 ROLAND CLARKE PLACE RESTON, VA 20191				ART UNIT	PAPER NUMBER	
,				2154		

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DATE MAILED: 10/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)					
		09/846,568	MARTIN ET AL.					
	Office Action Summary	Examiner	Art Unit					
		Jungwon Chang	2154					
Period fo	The MAILING DATE of this communication app or Reply	ears on the cover sheet wit	h the correspondence addi	ress				
WHIC - Exte after - If NC - Failu Any	ORTENED STATUTORY PERIOD FOR REPLY CHEVER IS LONGER, FROM THE MAILING DANSIONS of time may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. O period for reply is specified above, the maximum statutory period ver to reply within the set or extended period for reply will, by statute, reply received by the Office later than three months after the mailing ed patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNIC 16(a). In no event, however, may a re- rill apply and will expire SIX (6) MONT cause the application to become ABA	CATION.  ply be timely filed  THS from the mailing date of this com  ANDONED (35 U.S.C. § 133).	,				
Status								
1)⊠	Responsive to communication(s) filed on 31 Ju	lv 2006						
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٥,۵	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.							
Dispositi	ion of Claims		·					
4)⊠	Claim(s) 1-20 is/are pending in the application.							
•	4a) Of the above claim(s) is/are withdraw	n from consideration.						
	Claim(s) is/are allowed.							
·	Claim(s) <u>1-20</u> is/are rejected.							
•	Claim(s) is/are objected to.							
	Claim(s) are subject to restriction and/or	election requirement.						
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•	The specification is objected to by the Examine		. –					
10)	The drawing(s) filed on is/are: a) acce	•	•					
	Applicant may not request that any objection to the		•					
4.43[]	Replacement drawing sheet(s) including the correct							
11)	The oath or declaration is objected to by the Ex	aminer. Note the attached	Office Action or form PTO	<i>⊦</i> -152.				
Priority ι	ınder 35 U.S.C. § 119							
	Acknowledgment is made of a claim for foreign	priority under 35 U.S.C. §	119(a)-(d) or (f).					
a)	☐ All b)☐ Some * c)☐ None of:							
	1. Certified copies of the priority documents have been received.							
	2. Certified copies of the priority documents							
	3. Copies of the certified copies of the prior	-	eceived in this National St	tage				
	application from the International Bureau (PCT Rule 17.2(a)).							
* 8	See the attached detailed Office action for a list of	of the certified copies not r	eceived.					
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Attachmen	t(s)							
	e of References Cited (PTO-892)		immary (PTO-413)					
· =	e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO/SB/08)		/Mail Date formal Patent Application					
	r No(s)/Mail Date	6)  Other:	• •					

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## **FINAL ACTION**

1. This Action is in response to Amendment filed on 7/31/06. Claims 12-20 are added. Claims 1-20 are presented for examination.

2. Claim 12 is objected to under 37 CFR 1.75 as being a substantial duplicate of claim 1. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k). Claim 12 is written in very nearly the same language as the preamble of claim 1.

## Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 1 and 4-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sarukkai (US 6,775,695), in view of Glance et al. (US 6,415,368), hereinafter Glance.
- 5. As to claim 1, Sarukkai discloses the invention substantially as claimed, including

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a method for adapting to change in a demand on a web server (col. 1, lines 22-30), comprising:

associating session tracking objects with browsers that access a web server (figs. 2-4; col. 2, lines 43-47; col. 4, lines 1-38, "traces are logs of client sessions on the Internet"), wherein the session tracking objects include web pages requested by the browsers (figs. 2-4; col. 2, lines 43-47; col. 4, lines 1-38); and

analyzing the web pages requested by the browsers to determine caching priorities for the web server (col. 5, lines 27-33).

- 6. Although each web page is associated an identification (URL) that is known to one of ordinary skill in the art, Sarukkai does not specifically disclose identifications of web pages. Glance discloses identifications of web pages (col. 1, lines 14-16; col. 2, lines 43-45; col. 3, lines 10-58). It would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teachings of Sarukkai and Glance because Glance's identifications of web pages would be easily accessed by the server to assign a caching priority to each URL periodically (Glance, col. 6, lines 44-66).
- 7. As to claim 4, Sarukkai discloses wherein the session tracking objects are HTTP session objects (figs. 2-4; col. 2, lines 43-47; col. 4, lines 1-38).
- 8. As to claim 5, Sarukkai discloses wherein the caching priorities are proportional to relative frequencies of browser requests for web pages (col. 4, lines 39-61).

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- 9. As to claim 6, Sarukkai discloses wherein the caching priorities are proportional to recency of browser requests for web pages (col. 1, line 66 col. 2, line 2; col. 2, lines 38-42; col. 6, lines 21-30).
- 10. As to claim 7, Sarukkai discloses wherein the act of analyzing is performed periodically (col. 11, lines 8-13).
- 11. As to claim 8, Sarukkai discloses wherein the act of analyzing is performed in response to a triggering event (col. 8, lines 28-53, "requesting a document").
- 12. As to claims 9-11, they are rejected for the same reasons set forth in claim 1 above. In addition, Sarukkai discloses caching replacement algorithm (col. 5, line 48 col. 6, lines 37). Using the caching replacement algorithm, the web pages stored in the cache are updated. Furthermore, Glance discloses altering a server cache responsive to the caching priorities (i.e., caching replacement algorithm; col. 1, lines 31-45; calculate priority weight of URL, update cache index, 68, fig. 2; update cache index with URL, weight, timestamp, 86, fig. 3; col. 8, lines 21-23). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Sarukkai and Glance because Glance's altering the server cache would improve quality of service by periodically updating the server cache with newly calculated priority of web pages (col. 1, lines 31-45; calculate priority weight of URL,

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update cache index, 68, fig. 2; update cache index with URL, weight, timestamp, 86, fig. 3; col. 8, lines 21-23).

- 13. As to claim 12, Sarukkai discloses wherein the method ensures that a web site adapts to changes in demand (col. 1, lines 22-30).
- 14. As to claims 15 and 18, Sarukkai discloses further comprising determining whether an HTTP session object exists for one of the browsers (figs. 2-4, 6; col. 2, lines 43-47; col. 4, lines 1-38, "traces are logs of client sessions on the Internet").
- 15. As to claims 16 and 19, they are rejected for the same reasons set forth in claim 1 above.
- 16. Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sarukkai, Glance, further in view of Ronald et al. (US 2003/0041143), hereinafter referred to as Ronald.
- 17. As to claims 2 and 3, Sarukka and Glance do not specifically disclose the identifications of the last N pages requested by each of the browsers and N is five.

  Ronald discloses the identifications of the last N pages requested by each of the browsers (fig. 5; page 5, [0069], [0070]) and N is five (i.e., if user starting from page E D G M N, then N is five; or if user starting from page F D G M N, then N is

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five; fig. 5). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Sarukka, Glance and Ronald because Ronald's identification of the requested last pages would allow the web server to determine the popularity of each web page by analyzing the number of times users have visited the web pages.

- 18. Claims 13, 14 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sarukkai, Glance, further in view of Klopp Lemon et al. (US 2002/0156881), hereinafter Klopp.
- 19. As to claims 13, 14 and 17, Sarukkai discloses associate each user with a session tracking object of the session tracking objects and to maintain information about requests of the browser, and web server inherently includes servlets. However, Sarukkai does not specifically disclose servlets. Klopp discloses servlets (23, fig. 1; page 2, 0030, 0037, 0045; page 4, 0066, page 5, 0072). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Sarukka, Glance and Klopp because Klopp's servlet would handle HTTP requests and generate dynamic content, and keep tracking of user session (Klopp, page 2, 0045; page 4, 0060).
- 20. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Asai et al. (US 6,760,765), hereinafter Asai, in view of Knouse et al. (US 2003/0074580),

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hereinafter Knouse, Glance et al. (US 6,415,368), hereinafter Glance.

21. As to claim 20, Asai discloses a method for adapting to change in demand on a web server (col. 13, lines 19-29), comprising:

determining whether HTTP session objects exist for browser, wherein the HTTP session objects enable session tracking (11, fig. 1, "session management unit"; fig. 5; fig. 10; ;

associating session tracking objects with the browsers that access a web server which includes a plurality of servlets, a caching algorithm, and a fast memory cache (10, 33, fig. 1), wherein the session tracking objects include identifications of web pages requested by the browsers (fig. 5, "distributed data no."; fig. 10; col. 19, lines 36-42; col. 19, line 51 – col. 20, line 40),

analyzing the identifications of the web pages (distribution streams 1 or distribution streams 2, fig. 6) requested by the browsers to determine caching priorities for the web server (cache server 2 has a highest priority, fig. 6; col. 16, lines 25-32); and wherein the method ensures that a web site adapts to changes in demand.

22. Asai does not specifically disclose if an HTTP session object does not exist for one of browsers which requested one of the web pages, creating with the web server an HTTP session object for the browser. Knouse discloses if an HTTP session object does not exist for one of browsers which requested one of the web pages, creating with the web server an HTTP session object for the browser (3112, fig. 59, "create user").

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session object"; page 32, 0332, "a user session object is created"; page 33, 0335, "a user session object is created, if it has not already been created"). It would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teachings of Asai and Knouse because Knouse's creating session object would allow the server to track the user's start time and last use time (Knouse, page 32, 0332).

23. Asai discloses altering a server cache (col. 21, line 64 – col. 22, line 13). However, Asai does not specifically disclose altering a server cache responsive to the caching priorities. Glance discloses altering a server cache responsive to the caching priorities (i.e., caching replacement algorithm; col. 1, lines 31-45; calculate priority weight of URL, update cache index, 68, fig. 2; update cache index with URL, weight, timestamp, 86, fig. 3; col. 8, lines 21-23). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Asai and Glance because Glance's altering the server cache would improve quality of service by periodically updating the server cache with newly calculated priority of web pages (Glance, col. 1, lines 31-45; calculate priority weight of URL, update cache index, 68, fig. 2; update cache index with URL, weight, timestamp, 86, fig. 3; col. 8, lines 21-23).

## Conclusion

24. Applicant's arguments filed on 7/31/06 have been fully considered but they are not persuasive.

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(1) Applicant agues on page 6 of the Remarks that "Applicants do not dispute that Sarukkai relates to document caching with a server".

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., *document caching with a server*) are not recited in the rejected claim(s).

Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

(2) Applicant agues on page 7 of the Remarks that Sarukkai does not disclose or suggest associating session tracking objects with browsers that access a web server, wherein the session tracking objects include identification of web pages requested by the browsers.

The examiner respectfully disagrees. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Since the session tracking objects are not clearly defined in claims and specification, the examiner can interpret the claim language broadly. Therefore, Sarukkai explicitly discloses associating session tracking objects with browsers that access a web server (figs. 2-4; col. 2, lines 43-47,

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"monitoring the number of documents requested may be performed across two or more web servers in the current session...monitoring the number of documents requested may be performed across one or more timeouts in the current session"; col. 4, lines 1-17, "traces are logs of client sessions on the Interne...the X axis represents each unique document references in the trace, and the Y axis corresponds to the number of times the documents have been accessed, plotted in a log-log scale"; col. 4, lines 18-38, "analyzing traces to determine the number of links followed in a client session, the work by Huberman et al. considers a session to be consecutive hits to the same server by the client'; col. 8, lines 17-27, "cookies that inherently are used to store session information during user requests for information), wherein the session tracking objects include web pages (documents) requested by the browsers (figs. 2-4; col. 2, lines 43-47; col. 4, lines 1-38; col. 8, lines 17-27). As stated in paragraph 5 above, "although each web page is associated an identification (URL) that is known to one of ordinary skill in the art, Sarukkai does not specifically disclose identifications of web pages. Glance is relied upon only to teach identifications of web pages (col. 1, lines 14-16; col. 2, lines 43-45; col. 3, lines 10-58).

(3) Applicant agues on page 7 of the Remarks that Glance, like Sarukkai, does not disclose or suggest associating session tracking objects with browsers that access a web server, wherein the session tracking objects include identification of web pages requested by the browsers.

In response to applicant's arguments against the references individually, one

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cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See In re Keller, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); In re Merck & Co., 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Since the session tracking objects are not clearly defined in claims and specification, the examiner can interpret the claim language broadly. Therefore, Sarukkai explicitly discloses associating session tracking objects with browsers that access a web server (figs. 2-4; col. 2, lines 43-47, "monitoring the number of documents requested may be performed across two or more web servers in the current session...monitoring the number of documents requested may be performed across one or more timeouts in the current session"; col. 4, lines 1-17, "traces are logs of client sessions on the Interne...the X axis represents each unique document references in the trace, and the Y axis corresponds to the number of times the documents have been accessed, plotted in a log-log scale"; col. 4, lines 18-38, "analyzing traces to determine the number of links followed in a client session, the work by Huberman et al. considers a session to be consecutive hits to the same server by the client"; col. 8, lines 17-27, "cookies that inherently are used to store session information during user requests for information), wherein the session tracking objects include web pages (documents) requested by the browsers (figs. 2-4; col. 2, lines 43-47; col. 4, lines 1-38; col. 8, lines 17-27). As stated in paragraph 5 above, "although each web page is associated an identification (URL) that is known to one of ordinary skill in the art, Sarukkai does not specifically disclose identifications of web pages. Glance is relied upon only to teach identifications of web

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pages (col. 1, lines 14-16; col. 2, lines 43-45; col. 3, lines 10-58)

25. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

26. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jungwon Chang whose telephone number is 571-272-3960. The examiner can normally be reached on 9:30-6:00 (Monday-Friday).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John A Follansbee can be reached on 571-272-3964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

October 10, 2006

JUNGWON CHANG PRIMARY EXAMINER TECHNOLOGY CENTER 2100